

# Association of Mental Health with Spiritual Health: A Cross-sectional Study on Geriatric Population of Jaipur City (Rajasthan) India

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**Abstract**—*Spiritual health is not given its due importance since long time. But nowadays modern medicine is seen in relation to spiritual health and studies were conducted to find out its effect in various diseases. So this study was conducted on elderly aimed to assess the spiritual health and its association with psycho wellness. For study purpose, 30 cluster technique to identify houses with elderly ( $\geq 60$  years) in Municipal Corporation area of Jaipur City. After collecting general information Spiritual Health Assessment Scale (SHAS) was used to assess spiritual health and Modified Mini Screen (MMS) was used to assess psycho-wellness in elderly. Data were analysed and inferred by Chi-square test and ANOVA with Post-hoc Tukey test. Majority of elderly were having poor spiritual health and this spiritual health was strongly associated with psycho-wellness in elderly. Poorer the spiritual health of elderly leads to poorer the psycho-wellness in elderly.*

**Keywords**— *Spiritual health, Psycho-wellness, Spiritual Health Assessment Scale (SHAS), Modified Mini Screen (MMS), Elderly*

## I. INTRODUCTION

Spirituality is an important part of human existence but is often overlooked in the conceptualization of the person as a bio-psycho-social entity. It involves the ways in which people fulfill what they hold to be the purpose of their lives, a search for the meaning of life and a sense of connectedness to the universe. It is a sacred realm of human experience. There are some reports which suggest that some areas of the brain, mainly the non dominant one, are involved in the appreciation and fulfillment of spiritual values and experiences.<sup>1,2,3</sup>

There is no one definition, but in general, spirituality is something everyone can experience, helps us to find meaning and purpose in the things we value, can bring hope and healing in times of suffering and loss and encourages us to seek the best relationship with ourselves, others and what lies beyond.<sup>4</sup> Spirituality often becomes more important in times of emotional stress, physical and mental illness, loss and the approach of death<sup>4</sup>.

The technological advances of the past century tended to change the focus of medicine from a caring, service oriented model to a technological, cure-oriented model. In the past few decades physicians have attempted to balance their care by reclaiming medicine's more spiritual roots, recognizing that until modern time's spirituality was often linked with health care.

In the past 10-20 years there has been increasing interest in the relationship between spirituality and health. Recently, the National Institute of Health has begun funding controlled studies, (over 130 of them), to investigate the role of spirituality in health<sup>5</sup>

Association of American Medical Colleges Report III<sup>6</sup> said that Spirituality is recognized as a factor that contributes to health in many ways and it can influence how patients and health care professionals perceive health and illness and how they interact with one another.<sup>6</sup>

Spirituality and psychiatry - on the face of it, they do not seem to have much in common. But we are becoming increasingly aware of ways in which some aspects of spirituality can offer real benefits for mental health. Psychiatry and religion often provide alternative explanations for many of life's deepest and most mysterious phenomena.

Geriatric population i.e. aged 60 years and above is expected to constitute 10.2% of the total world population. Social and economic conditions, such as poverty, break up of joint families and poor services to the elderly, pose a psychiatric threat to them. Emergence of nuclear families, increased cost of living, and change in priorities of a family has adversely affected the elderly in India. Functional dependency is common among elderly people and many would need assistance in their activities of daily living. Psychiatric morbidity, which increases with age, is more prevalent in the geriatric (43.32%) than in the non-geriatric group (4.66%)<sup>7</sup>.

So this study was conducted with the aim to assess the spiritual health of elderly and its association with psycho-wellness in elderly.

## II. METHODOLOGY

This present cross-sectional community based descriptive observational study was conducted on elderly population in year 2014 within the municipal corporation limits of Jaipur city of Rajasthan.

Sample size was calculated 490 individuals of 60 years and above at confidence limit 95% and allowable error 15% assuming 26.7% psychiatric morbidity in elderly population. As this study was conducted by 30 cluster technique so sample size was made double i.e. 990 elderly individual.<sup>8</sup>

$$\text{Calculation Of Sample Size:- Sample Size} = \frac{4PQ}{L^2} = 4 \times 26.7 \times 73.3 / 4 \times 4 = 490$$

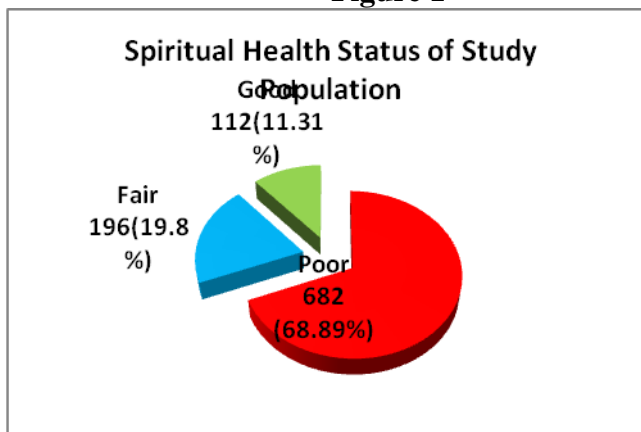
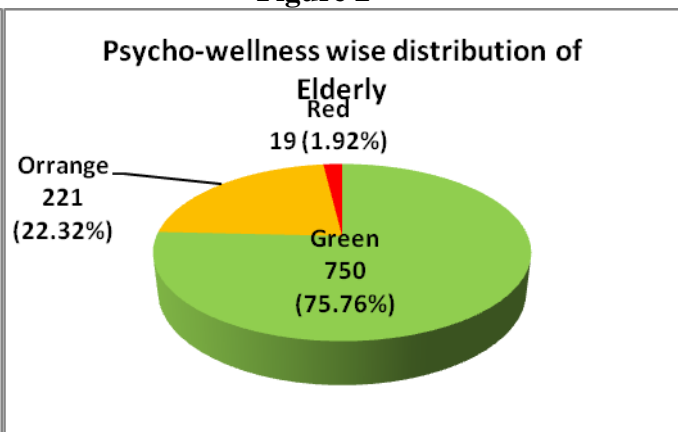
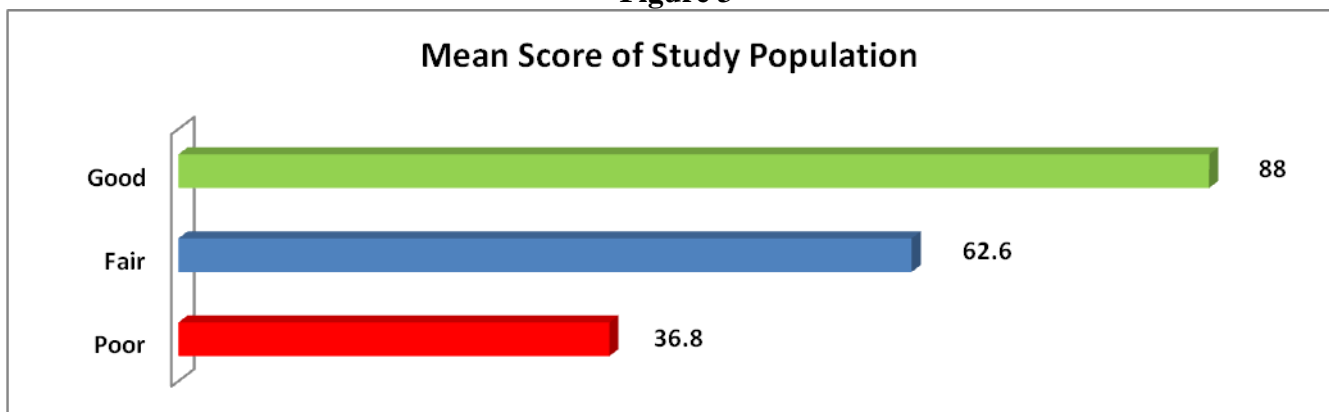
$$\text{Estimated sample size} = 490 \times D = 490 \times 2 = 980 \approx 990$$

Here, P=Prevalence(26.7%), Q= 1-P, L= Error (15% of P) and Design effect (D) = 2

Thus 33 elderly eligible elderly were identified from each of 30 cluster to cover whole of municipal corporation limits of Jaipur city. To select eligible elderly house to house survey was conducted after selecting the landmark randomly from all the landmark of the cluster. Eligibility of elderly was determined by age 60 years and above who has given written informed consent and were without any chronic illness and able to communicate. These identified elderly after interrogating as per Spiritual Health Assessment Scale (SHAS)<sup>9</sup> and Modified Mini Screen Scale (MMS)<sup>10</sup> with general information about them. Data thus collected were analyzed and classified on MS Excel 2007. Association of Spiritual health with Psychiatric wellness was inferred by Chi-Square Test and ANOVA test with post-hoc Tukey test with the help of statistical software Primer version 6.

## III. RESULTS

In the present study it was observed that out of total 990 elderly, only 112 (11.31%) were having good spiritual health otherwise majority i.e. 682 (68.89%) were in poor status of spiritual health as per SHAS.<sup>9</sup> (Fig. 1) Poor, fair and good spiritual health status of these elderly were having 36.8, 62.6 and 88 mean scores respectively. (Fig. 3) This study observed that out of 990 elderly, 750 elderly were in green zone whereas 240 (24.24%) were either in red or orange zone of psycho-wellness. (Fig. 2)

**Figure 1****Figure 2****Figure 3**

When the domains of spiritual health were concerned it was found that Self Realization was having significantly ( $p < 0.001$ ) lesser mean score than Self Development and Self Actualization. And among these two domains i.e. Self Development and Self Actualization, Self Development were having significantly ( $p < 0.001$ ) lesser mean score than Self Development and Self Actualization. (Table 1)

**Table 1**  
**Domains wise Mean Scores of Study Population (N=990)**

S. No.	Domains of SHAS	Mean Scores	SD of Scores
1	Self Development (Maximum =35)	22.8	5.2
2	Self Actualization (Maximum =35)	11.3	4.6
3	Self Realization (Maximum =35)	0.4	0.2
4	Overall SHAS Scores (Maximum =105)	62.47	14.8

ANOVA - Analysis of Variance (F) = 7724.83

P&lt;0.001

LS=S

--- Multiple Comparisons - Post-Hoc Tukey Test--- Degrees of freedom: 2967

Comparison	Difference of means	SE	p	q	P<.05
1 vs 3:	22.8 - 0.4 = 22.4	0.1274	3	175.761	Yes
1 vs 2:	22.8 - 11.3 = 11.5	0.1274	3	90.234	Yes
2 vs 3:	11.3 - 0.4 = 10.9	0.1274	3	85.527	Yes

When the association of spiritual health with psycho-wellness of elderly was observed in this study it was found that proportion of poor spiritual health elderly were in red and orange zone (29.18%) than that of fair and good spiritual health status elderly i.e. 29.18%, 19.9% and 1.79% respectively of poor, fair and good spiritual health status elderly . And this variation in distribution of elderly as per spiritual health status was found significant ( $p<0.001$ ). Likewise So it can be depicted that better the spiritual health of elderly probability of better psycho-wellness are more. (Table 2)

**Table 2**  
**Association of Spiritual Health with Psycho-wellness in Elderly (N=990)**

S. No.	Spiritual Health as per SHAS	Total Elderly	Number of elderly in Various Psycho-wellness zones as per MMS			
			Green		Orange	Red
1	Poor	682	483	70.82	184	15
2	Fair	196	157	80.10	35	4
3	Good	112	110	98.21	2	0
4	Total	990	750	75.76	221	19

Chi-square Test = 42.118 at 4 DF

$P<0.001$

LS=S

#### IV. DISCUSSION

In the present study only 11.31% were having good spiritual health otherwise majority i.e. 68.89% were in poor status of spiritual health. Another study<sup>9</sup> done in Rajasthan reported 72.19%, 27.52% and 0.29% subjects in poor, fair and good spiritual health status. This difference may be because this present study was conducted on elderly who had experience life more and inclined more towards good character and morality which is directly proportional to spirituality. Likewise Poor, fair and good spiritual health status of these elderly were having 36.8, 62.6 and 88 mean scores respectively in the present study whereas bit little lower mean scores were reported by another study.<sup>9</sup> Reason for this may be supra-said that this present study was conducted on elderly .

Present study observed that a quantifiable elderly (24.24%) were either in red or orange zone of psycho-wellness. Almost similar observations were made by Seby K et al (2011)<sup>11</sup> who reported the overall prevalence of psychiatric morbidity in the geriatric population was 26.7%.

When the domains of spiritual health were concerned it was found that Self Realization was having least mean score and Self Actualization were having lesser mean score than Self Development. This may be explained by the fact that Self Realization is the deepest part of spirituality then Self Actualization and Self Development. This explanation is supported with observations made by Neera D etall.<sup>12</sup>

Present study revealed a strong association between spiritual health and psycho-wellness of elderly. It was depicted that better the spiritual health of elderly probability of better psycho-wellness are more. Other authors<sup>5</sup> also reported similar type of association between spiritual health and psycho-wellness. Of 212 studies examining the effects of spirituality and health care outcomes, 75% demonstrated a positive benefit while 17% revealed mixed or no effect.<sup>5</sup> Few of the authors<sup>4,5,6,13</sup> find out similar type of association between spiritual health and psycho-wellness whereas few of authors<sup>14,15</sup> established that improving spiritual health psychiatric morbidity can be improved. So many of the Psychologist practicing spiritually for the benefit of their patients.

#### V. CONCLUSION

Majority of elderly were having poor spiritual health and this spiritual health was strongly associated with psycho-wellness in elderly. Poorer the spiritual health of elderly leads to poorer the psycho-wellness in elderly.

## CONFLICT OF INTEREST

None declared till now.

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